Electronic Version
Stylesheet Version v1.1.1

Claims

[c1] What is claimed is:

1.An optical disc drive comprising:

a lower housing comprising:

a plurality of lower guiding flaps for guiding the lower housing into proper position during assembly; and

a plurality of openings formed in the lower housing;

a loader for reading an optical disc, the loader being disposed on the lower housing, the loader comprising a plurality of guiding holes for receiving the corresponding lower guiding flaps as the loader is disposed on the lower housing; and

an upper housing disposed on the lower housing for enclosing the loader between the upper housing and the lower housing, the upper housing comprising:

a plurality of upper guiding flaps formed for insertion into the corresponding guiding holes of the loader for guiding the upper housing into proper position during assembly; and

a plurality of hooks formed for insertion into the corresponding openings of the lower housing for securing the upper housing to the lower housing.

[c2] 2.The optical disc drive of claim 1 wherein each of the lower guiding flaps is monolithically formed with the lower housing by cutting a pattern in the lower housing and folding the lower guiding flaps inward, leaving an exposed hole on a bottom surface of the lower housing.

[c3] 3.The optical disc drive of claim 1 wherein each of the upper guiding flaps is monolithically formed with the upper housing by cutting a pattern in the upper housing and folding the upper guiding flaps inward, leaving an exposed hole on a top surface of the upper housing.

[c4] 4.The optical disc drive of claim 1 wherein the openings are formed in side surfaces of the lower housing.

[c5] 5.The optical disc drive of claim 4 wherein the hooks are formed on side surfaces of the upper housing corresponding to the openings of the lower housing.

[c6] 6.The optical disc drive of claim 5 wherein each of the hooks is capable of being released from the corresponding opening by pushing the hook toward the opening in a direction perpendicular to the side surface of the lower housing.

[c7] 7.The optical disc drive of claim 1 wherein the openings are formed above a bottom surface of the lower housing, the hooks are formed below a top surface of the upper

housing corresponding to the openings of the lower housing, and the loader comprises a plurality of tunneling holes through which the hooks insert into the corresponding openings.

[c8] 8.The optical disc drive of claim 7 wherein each of the hooks is capable of being released from the corresponding opening by pushing the hook downward.

[c9] 9.The optical disc drive of claim 1 wherein the openings are formed above a bottom surface of the lower housing, the hooks are formed below a top surface of the upper housing corresponding to the openings of the lower housing, and the hooks insert into the corresponding openings through the guiding holes of the loader.

[c10] 10.The optical disc drive of claim 1 wherein the openings have a rectangular shape.

[c11] 11.The optical disc drive of claim 1 wherein a cross-sectional area of the hooks has a J-shape.

[c12] 12.An electrical device comprising:
a lower housing comprising:
a plurality of lower guiding flaps for guiding the lower housing into proper position during assembly; and
a plurality of openings formed in the lower housing;
a plastic housing disposed on the lower housing, the

plastic housing comprising a plurality of guiding holes for receiving the corresponding lower guiding flaps as the plastic housing is disposed on the lower housing; and

an upper housing disposed on the lower housing for enclosing the plastic housing between the upper housing and the lower housing, the upper housing comprising:

a plurality of upper guiding flaps formed for insertion into the corresponding guiding holes of the plastic housing for guiding the upper housing into proper position during assembly; and

a plurality of hooks formed for insertion into the corresponding openings of the lower housing for securing the upper housing to the lower housing.

[c13] 13.The electrical device of claim 12 wherein each of the lower guiding flaps is monolithically formed with the lower housing by cutting a pattern in the lower housing and folding the lower guiding flaps inward, leaving an exposed hole on a bottom surface of the lower housing, and each of the upper guiding flaps is monolithically formed with the upper housing by cutting a pattern in the upper housing and folding the upper guiding flaps inward, leaving an exposed hole on a top surface of the upper housing.

[c14] 14.The electrical device of claim 12 wherein the openings are formed in side surfaces of the lower housing, and the hooks are formed on side surfaces of the upper housing corresponding to the openings of the lower housing.

[c15] 15.The electrical device of claim 14 wherein each of the hooks is capable of being released from the corresponding opening by pushing the hook toward the opening in a direction perpendicular to the side surface of the lower housing.

[c16] 16.The electrical device of claim 12 wherein the openings are formed above a bottom surface of the lower housing, the hooks are formed below a top surface of the upper housing corresponding to the openings of the lower housing, and the plastic housing comprises a plurality of tunneling holes through which the hooks insert into the corresponding openings.

[c17] 17.The electrical device of claim 16 wherein each of the hooks is capable of being released from the corresponding opening by pushing the hook downward.

[c18] 18.The electrical device of claim 12 wherein the openings are formed above a bottom surface of the lower housing, the hooks are formed below a top surface of

the upper housing corresponding to the openings of the lower housing, and the hooks insert into the corresponding openings through the guiding holes of the plastic housing.

[c19] 19.The electrical device of claim 12 wherein the openings have a rectangular shape and a cross-sectional area of the hooks has a J-shape

20.The electrical device of claim 12 being an optical disc drive.